SEPTEMBER 9,2004

## REGIONAL DIRECTOR'S OFFICE



Western Region Welcomes New Admin Chief: Please join us in welcoming Brian Sadler to the National Weather Service. Brian recently joined WRH staff as the new Admin Chief.

Brian, a Utah native, left Utah nine years ago to work for the Air Force in Cheyenne, Wyoming. His career later took him to Washington D.C., where he was a Contract Specialist for Peace Corps. He also met his wife and was married in May 2000. Six months later, he and his wife took off for the Pacific where Brian

was the Administrative Officer for Peace Corps Kiribati. They had an amazing experience on the extremely remote corral attols. After 2 1/2 years, they transferred to Guyana, South America and experienced a completely different culture and geography before being hired by the National Weather Service.

Brian says he is very happy to be part of the NWS and to be back in Utah. He looks forward to meeting and working with the great staff in Western Region.

## METEOROLOGICAL SERVICES DIVISION

Statement of the Week: Strong thunderstorms with heavy rain formed over Inyo County, CA, during the early evening of Sunday, August 15, resulting in severe flash flooding in Death Valley National Park, CA. Several roads were washed out, including both roads in and out of Furnace Creek. At least 2000 people were stranded in the park on Monday until ingress/egress roads could be opened. Tragically two people were found dead in their car Monday afternoon, August 16. The car was buried in mud, rock and debris. Officials surmise the couple's car was overcome by a mud and rock slide, along with rapidly rising flood waters.

WFO Las Vegas provided outstanding forecast and warning services for this event. The potential for flash flooding was highlighted for three consecutive days (Thursday, August 12 through Saturday, August 14) in the HWO product. A flash flood watch was issued in the morning, ten hours prior to the development of the thunderstorms which prompted a flash flood warning prepared by lead forecaster John Adair. The warning was issued with 45 minutes lead time and specifically stated "flash flooding is likely across extensive portions of Death Valley National Park on Highway 190 between Panamint Springs and Stovepipe Wells and down to Death Valley Junction. Highways 178 and 127 in the southern part of Death Valley National Park will likely see areas of flooding until at least 1030 PM."

Ms. Roxanne Day of the National Park Service (NPS) informed WFO Las Vegas that the flash flood warning prompted a NPS employee to race out and try to catch up with three groups of people he knew were heading into the high threat area specified in the warning. They were apparently going to camp and hike in the area. He caught up with them and notified them of the danger. While they were taking, a wall of mud and water came rushing out of the canyon where they were headed and washed out the road before them. The people he rescued are convinced he saved their lives. Working together with our partners in the emergency response community, the NWS warning program does save countless lives each year. Our sincerest congratulations to John and all the staff of WFO Las Vegas involved in this outstanding effort!

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BULLETIN - EAS ACTIVATION REQUESTED FLASH FLOOD WARNING NATIONAL WEATHER SERVICE LAS VEGAS NV 745 PM PDT SUN AUG 15 2004

THE NATIONAL WEATHER SERVICE IN LAS VEGAS HAS ISSUED A

- \* FLASH FLOOD WARNING FOR...
  SOUTHEASTERN INYO COUNTY IN EASTERN CALIFORNIA
- \* UNTIL 1030 PM PDT
- \* AT 738 PM PDT...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED WIDESPREAD HEAVY RAIN PRODUCING THUNDERSTORMS FROM HIGHWAY 78 NORTH OF TRONA ACROSS DEATH VALLEY NATIONAL PARK TO STOVEPIPE WELLS AND HIGHWAY 374 AND DOWN TO HIGHWAY 127 NEAR SHOSHONE. THE THUNDERSTORMS WERE MOVING NORTHEAST AT 15 MPH.

RAINFALL AMOUNTS BETWEEN ONE AND TWO INCHES WILL BE LIKELY WITH THESE STORMS WITH SOME AREAS LIKELY RECEIVING MORE THAN TWO INCHES OF RAINFALL IN A SHORT PERIOD OF TIME. THESE STORMS WILL CAUSE FLASH FLOODING ALONG HIGHWAY 178 SOUTH BETWEEN TRONA AND HIGHWAY 190. ALSO FLASH FLOODING IS LIKELY ACROSS EXTENSIVE PORTIONS OF DEATH VALLEY NATIONAL PARK ON HIGHWAY 190 BETWEEN PANAMINT SPRINGS AND STOVEPIPE WELLS AND DOWN TO DEATH VALLEY JUNCTION. HIGHWAYS 178 AND 127 IN THE SOUTHERN PART OF DEATH VALLEY NATIONAL PARK WILL LIKELY SEE AREAS OF FLOODING UNTIL AT LEAST 1030 PM.

BE ESPECIALLY CAUTIOUS AT NIGHT WHEN IT IS HARDER TO RECOGNIZE THE DANGERS OF FLOODING. IF FLASH FLOODING IS OBSERVED ACT QUICKLY. MOVE UP TO HIGHER GROUND TO ESCAPE FLOOD WATERS. DO NOT STAY IN

#### AREAS SUBJECT TO FLOODING WHEN WATER BEGINS RISING.

LAT...LON 3608 11760 3586 11739 11610 3597 11589 3690 11712

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#### **ADAIR**



Monterey forecaster Mark Strobin is filmed by the documentary crew.

British Documentary Crew Visits WFO Monterey: A film crew with the British "Principal Media Group" paid a visit to WFO Monterey on August 30. The crew is producing a one-hour documentary about the Golden Gate Bridge, as part of a series called "Mega structures." During their visit, the crew filmed the office's weather discussion and interviewed Warning Coordination Meteorologist Dave Soroka. They discussed the climate of the Bay Area, weather impacts on the workers during construction, and how the bridge has stood up to harsh environmental extremes over the years, especially strong winds (the Golden Gate Bridge has been closed three

times due to high winds). The documentary is expected to be aired next spring or summer on the National Geographic Channel.



Next year's tournament is slated to return to Ft Lewis next summer.

**2004 Pacific NW Weather Scramble**: The annual Pacific NW Weather Scramble golf tournament was held on August 14 at Ft. Lewis Golf Course south of Tacoma, WA. The tournament had 40 players from around the Pacific Northwest, including three from Utah. Everyone had fun under the sun and enjoyed the drawing for extra prizes.

The winning team shot a score of 64 (eight-under par). The team included Taryn Haladay, Mark O'Malley, Steve Gohde and Andy Bryant, all from the Portland WFO and RFC (see photo). One shot back in second place was

Paul Meury (Washington State Health/Social Services), Don Miller (Washington State Emergency Management), and guests Kent Dimmitt and David Mudd. In third place, at 66 (6-under par), was Terry Simmonds (retired Washington State Department of Transportation) and guests Chuck Ruth, Bill Lihudis, and Jimmy Farler.

Long drives were won by Terry Simmonds, Taryn Haladay, and guest Mike Maiuri. Todd Carter of WFO Spokane won the closest to the pin on the 2<sup>nd</sup> hole, with a shot only 6 ¼ inches away from the cup. The other "closest to the pins" at the 8<sup>th</sup> and 12<sup>th</sup> holes were won by Kent Dimmitt and Bob Isaman (Washington St Emergency Management). The longest putt made on the par-3 15<sup>th</sup> hole was drained by Bob Richey, retired MSD Chief from WRH.



(L to R) Ms. Beatriz Moncayo and WFO San Diego MIC Jim Purpura

New Spokesperson for Spanish NOAA Weather Radio: WFO San Diego has found a new advocate for Spanish-language outreach. The WFO has made arrangements with Univision for Ms. Beatriz Moncayo to represent the NWS to the Hispanic community in southern California. Ms. Moncayo currently works at KVYE-TV, a Univision station in El Centro, California. Prior to that, she was a Weather Anchor at Univison's KORO-TV Corpus Christi. Ms. Moncayo has also hosted Enfoque Musical, a music program seen on Spanish language TV across the country, and was also a former Miss Colombia.

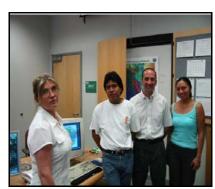
Ms. Moncayo will participate in the dedication ceremony for a Spanish language NOAA Weather Radio transmitter on September 10. This transmitter is the first of its kind in the western U.S., and is now on the air in the Coachella Valley (Palm Springs area) of southern California. Ms. Moncayo will also be the first NWS Spanish-language spokesperson for NOAA Weather Radio and will record Public Service Announcements in Spanish to air on Univision stations across southern California.

Ms. Moncayo paid a recent visit to WFO San Diego, and worked with forecaster Miguel Miller on both pronunciation and vocabulary on the new radio transmitter.

Moncayo said, "I am pleased to be able to work with the Hispanic community to bring home the life-saving message of NOAA Weather Radio. The Spanish language Weather Radio in the Coachella Valley will help bring the critical warning messages directly and immediately to our community."

The sponsor of the NOAA Weather Radio is the Coachella Valley Water District. The district will also donate \$5000 for purchase of Weather Radios by the Hispanic community.

### SCIENTIFIC SERVICES DIVISION



(L to R): Dr. Valentina Davydova, Jesus Carichure, Erik Pytlak and Monica Canul-Poot.

North American Monsoon Experiment (NAME): The North American Monsoon Experiment 2004 field campaign is winding down after many months of preparation and hard work by the 33 forecasters who rotated through the Forecast Operations at WFO Tucson. The last full day of support was August 19, although forecasts were issued remotely through August 31, and will continue to be issued as needed through October 1.

During the week of August 9, the Director of Meteorology for Servicio Meteorologico Nacional, Dr. Valentina

Davydova, led a four person delegation from Mexico City to the NAME FOC. Dr. Miguel Cortez, Chief of Medium Range prediction for SMN, served as science director that week as SMN forecasters Jesus Carichure and Monica Canul-Poot worked with Dr. Davydova and Dr. Art Douglas (Creighton University) to prepare the daily NAME forecasts and briefings.

The NAME Science Working Group gives a big thanks to Western Region meteorologists David Blanchard (FGZ), Stan Czyzyk (VEF), Melissa Goering (TWC), Valerie Meyers (TWC) and Hector Vasquez (PSR), who served as forecasters during the NAME project. The group also thanks WFOs San Diego, Las Vegas, Phoenix, Flagstaff and Tucson, as well as WSCMOs Mirimar, Desert Rock, and Tucson Airport, for providing the necessary upper air support during NAME. Without the forecast teams and the special upper air observations, the project would not have been the success it was.

Details on the experiment, including the daily forecast guidance for the NAME decision makers, can be found at: <a href="http://www.joss.ucar.edu/name">http://www.joss.ucar.edu/name</a>.

<u>PD&T and Intern Progress Reports Due October 15</u>: The biannual Western Region Professional Development and Training (PD&T) and Intern Progress Reports are due from each WFO and RFC on October 15, 2004. The WR supplement on this states these are normally due on September 15, but since many SOOs are attending the AWOC facilitator course in September, the due date has been pushed back to October 15.

<u>DGEX is Here</u>: The IFPS Science Steering Team (ISST) has been working with NCEP and OST to produce a better set of downscaled model based grids that can be used as a first guess fields for days 4-7 of the IFPS forecast grids. The project is called <u>Downscaled GFS</u> with <u>Eta Extension (DGEX)</u> and is the first step of several planned to provide a better suite of downscaled model grids. The DGEX data sets are now part of AWIPS OB 3.3. Stephen Jascourt is working on a teletraining session to explain DGEX. Tim Barker (SOO-Boise) has developed a set of baseline Smart-Init tools for DGEX. This effort was lead by the ISST. Mark Jackson (SOO-Salt Lake City) is the WR representative, and Brad Colman (SOO-Seattle) is the team leader.

<u>Teletraining Sessions for September</u>: The Virtual Institute for Satellite Integration Training (VISIT) and the Integrated Sensor Training Professional Development Series (ISTPDS) sessions for September are listed below. Offices can register for the teletraining sessions by sending email to: visit@comet.ucar.edu. The teletraining calendar is at: <a href="http://www.cira.colostate.edu/ramm/visit/ecal.asp">http://www.cira.colostate.edu/ramm/visit/ecal.asp</a>.

#### September sessions:

- \*\*NEW Modern Severe Weather Parameters (Basic, Sep 9,20,30)
- C QuikSCAT Winds (Basic, Sep 1,9,15)
- C Forecasting Convective Downburst Potential Using GOES Sounder Derived Products
  - (Basic, Sep 14, and ? See calendar)
- Interactive Cloud Height Algorithm and GOES Sounder Point Retrievals in AWIPS

- (Basic, Sep 3,16)
- Cyclogenesis: Analysis utilizing Geostationary Satellite Imagery (Basic, Sep 7,14)
- C Lightning Meteorology I (Basic, Sep 1)
- C Lightning Meteorology II (Advanced, Sep 2)
- \*\*NEW Downscaled GFS with Eta Extension (DGEX): Its uses and limitations (Basic, Sep 1,2,13,15,17,21,22,23,27,28,29)

#### October sessions:

- Downscaled GFS with Eta Extension (DGEX): Its uses and limitations (Basic, Oct 1,4,5,6,12,13,14,15,21,26,27,28)
- Modern Severe Weather Parameters (Basic, Oct 6,14,28)

The objectives of the new session "Downscaled GFS with Eta Extension (DGEX): Its uses and limitations" by Stephen Jascourt (UCAR/COMET/NWP Team) with support from the IFPS Science Steering Team are:

- 1. What is DGEX?
- 2. Why and how to use DGEX?
- 3. What fields are available?
- 4. Overall performance assessment

## Case examples:

- 1. Major factors causing DGEX differences from GFS
- 2. Major factors affecting DGEX accuracy and what can be done to reduce big errors

All sessions can be reviewed in advance by following the instructions in the student guides available on the ISTPDS/VISIT page: <a href="http://www.cira.colostate.edu/ramm/visit/visithome.asp">http://www.cira.colostate.edu/ramm/visit/visithome.asp</a>

**2004** Intermountain Workshop: The Eleventh Annual Workshop on Weather Prediction in the Intermountain West will be held on Thursday, November 4, 2004, at the University of Utah Huntsman Cancer Institute.

The objectives of this annual workshop are to discuss major issues related to operational meteorology over the western United States and to foster interaction between researchers, applied meteorologists, and other professionals who rely on operational weather forecasts or data.

The theme of the workshop is Impacts of Intermountain Anticyclones, and priority will be given to abstracts related to valley and basin cold pools, fog, air pollution, the North American Monsoon, and drought. Abstracts related to other areas of Intermountain meteorology and weather prediction will also be given consideration. Presentations may be given orally or as a poster, with the number of oral presentations limited.

To submit an abstract or simply register, please access the on-line registration form at <a href="http://www.met.utah.edu/jimsteen/cirp/workshop2004/workshop\_reg.html">http://www.met.utah.edu/jimsteen/cirp/workshop2004/workshop\_reg.html</a>. The deadline for abstract submission is September 17. The registration deadline is October

15. Please register as soon as possible to help us plan for the workshop. There are no fees associated with the Workshop.

The workshop is being hosted by the NOAA Cooperative Institute for Regional Prediction (<a href="http://www.met.utah.edu/jhorel/cirp">http://www.met.utah.edu/jhorel/cirp</a>). Attendees from beyond the Wasatch Front may contact the University Guest House at <a href="http://www.guesthouse.utah.edu">http://www.guesthouse.utah.edu</a> or at (888) 416-4075 for reservations. A limited number of rooms have been reserved for the Weather Prediction Workshop at a rate of \$69/night for November 3 and 4; reservations must be made by October 18.

<u>Advanced Warning Operations Course (AWOC)</u>: The dates for the "train the facilitator" portion of AWOC have been set. Each WFO/RFC has been assigned one slot for the SOO/DOH or radar focal point to attend the one week facilitator course at the WDTB in Norman OK. The upcoming AWOC course dates are:

Sep 14-16, 2004 Sep 21-23, 2004 Oct 13-14, 2004 (RFCs only)

## **AWOC Course Description:**

The Advanced Warning Operations Course (AWOC) will initially consist of two tracks — Core Track and Severe Weather Track. There will be a Winter Weather track added to the end of the course. Each track contains approximately 14 hours of training material (includes evaluation components). The course will be facilitated on site by an onsite facilitator (SOO, DOH, or locally appointed training officer). This facilitator will participate in a workshop in Norman, OK in August or September 2004. The AWOC will begin in October 2004 and will include a combination of distance learning technologies including teletraining, web-based training, computer-based training on CD-ROM, Weather Event Simulator (WES) simulations, and printed material. The course is designed to allow every NWS Forecaster (Meteorologist and Hydrologist) to participate. Each instructional component as described below will include a separate evaluation component that will be tracked by the AWOC on-site facilitator. Pre-test options will be available for many of the instructional components.

#### Facilitator Workshop:

The facilitator workshop will help develop a partnership between the WDTB and the AWOC on-site facilitator (one person from each office) who together will deliver the AWOC training. The attendee will become familiar with the roles and responsibilities of the WDTB and the on-site facilitator. The purpose and content of the course will be presented. A means by which to keep track of students and their progress will be discussed. Simulations will be an integral part of AWOC. The on-site facilitator will administer the simulations, choosing from several provided by WDTB or from locally developed simulations. The workshop will include instruction on simulation theory and tools, including evaluation techniques, for more effective delivery of simulations.

### **AWOC Core Track**:

Decision Making in a Warning Environment Brief Description:
 The content will focus on various aspects of decision making as it pertains to the operational warning environment. This will include the three levels of situation

awareness and how they are accounted for in the warning process. In addition, the meaning and value of expertise, as well as strategies for acquiring it, will be presented.

<u>Delivery Methods</u>: Teletraining, printed materials, and web support materials <u>Approximate Completion Time</u>: 4 hours

# 2. <u>Effective Office Warning Strategies Brief Description:</u>

The content will focus on putting together strategies which will allow the decision maker to make the best use of their skills and those of the warning team. This will include ways to manage workload and heighten communication. The benefits and challenges of coordination both within the office and with external partners will be illustrated.

<u>Delivery Methods</u>: Teletraining, printed materials, and support materials <u>Approximate Completion Time</u>: 2.5 hours

## 3. <u>Data Quality Brief Description</u>:

Radar, satellite, radar/satellite integration, ground truth and VCP Explorer are some of the topics that will be covered in this block. Emphasis will be on the impacts of poor data quality, strengths and limitations of various sensors, and optimum utilization of the various sensors to improve/mitigate data quality issues.

<u>Delivery Methods</u>: CD and web module <u>Approximate Completion Time</u>: 2.5 hours

## 4. <u>Societal Impacts and Public Perception Brief Description</u>:

This instructional component will explore the place of weather warnings in a sociological context, and identify elements of an effective warning.

Delivery Methods: web module

Approximate Completion Time: 2.5 hours

#### **AWOC Severe Weather Track:**

# 1. <u>Conceptual Models for Origins and Evolutions of Convective Storms and</u> Systems Brief Description:

Content will focus on recent (1994- present) research on conceptual models that describe important processes in convective storms or storm systems. Formation mechanisms and environmental parameters for supercell and squall line tornadoes, hail, high winds (wet and dry microbursts, bow echoes, derechos), and flash flooding (meteorological considerations) will be described.

Delivery Methods: web module

Approximate Completion Time: 2 hours

# 2. <u>Mesoanalysis for the Warning Forecaster Brief Description:</u>

This component will identify products and procedures for effective data analysis in completing short-term forecast job tasks (i.e., what a mesoanalysist should do in a severe weather warning methodology). Delivery Method: web module <a href="#">Approximate Completion Time</a>: 1.5 hours

# 3. <u>Storm Interrogation Strategies Brief Description</u>:

Topics in this section include methods to determine the qualitative strength of an updraft and its relation to most severe weather reports, techniques to determine the updraft location for sheared storms, and identifying characteristics of

tornadoes, flash floods, hail, and damaging winds.

Delivery Method: web module

Approximate Completion Time: 2.5 hours

4. <u>Application and Review of AWOC Severe Weather Track Brief Description</u>: This instructional component will use a case or two to review and illustrate the important considerations that a warning forecaster should apply in an effective warning methodology. This review will include components of threat assessment and storm interrogation strategies.

Delivery Methods: Teletraining and a printed student guide.

Approximate Completion Time: 1.5 hours

## 5. Simulations Brief Description:

Four simulations, complete with simulation guides, will be released with the AWOC. SOOs may choose to use these simulations as the simulations in the AWOC, or they may use them as a reference to develop their own local simulations for AWOC. The simulations in the AWOC can be used to fulfill the annual WES requirement of two simulations for the convective season.

<u>Delivery Methods</u>: Weather Event Simulator (WES) data with supporting simulation guides.

<u>Approximate Completion Time</u>: 5 hours (2.5 hours per simulation with 2 simulations

New Learning Management System (LMS) E-learning Library Access: All Western Region employees now have access to the NETg and Free Course libraries in the DOC/NOAA/NWS LMS. Access to the libraries may be found at: <a href="http://e-learning.doc.gov/noaa/">http://e-learning.doc.gov/noaa/</a>. If you have difficulty signing onto the site, please contact your SOO or DOH for the correct initial log-in and password. Employees will have access to these libraries through May 31, 2005.

<u>WES TA-Lites</u>: The majority of the summer Weather Event Simulator (WES) TA-Lites have been posted to the Western Region Home page and may be found at: <a href="http://www.wrh.noaa.gov">http://www.wrh.noaa.gov</a> under On-Line Publications. You are encouraged to check these out to see what your regional counterparts are choosing for WES training exercises, and if they may be useful in your own office training.

#### SYSTEMS OPERATIONS DIVISION

**New UPS**: A new Mitsubishi UPS was installed at WFO Billings by Lee Jenson and Mike Hume. The install began on August 16 and was completed by August 19.

**EPM to KC**: Joe Lachacz attended the Central Region Electronics Conference held at the Embassy Suites in Kansas City, MO (August 24-26). Many electronics topics and issues were covered at the conference.

<u>Office Support</u>: Kevin Bolton helped support the Las Vegas Electronics Program last week. Kevin worked with Alberto Jiminez on several outages that occurred during the monsoon season.

Great Falls Program Review: Jeff Walker, Joe Lachacz, and Son Nguyen conducted

the Great Falls SOD Program Review last week. Several equipment sites were visited.

<u>Web Work</u>: Jeff Walker, Graham Stork, and Andy Edman visited Southern Region on August 24. The purpose of this visit was to discuss Web Farm architecture and content. The new Western Region Web Farm architecture, directory structure, and "on-the-fly" total forecast page was highlighted and best practices were shared.



Blue Canyon Observing Station: Asbestos abatement and demolition of the old Blue Canyon observing station was finally completed due to great efforts by many WRH staff and Minh Trinh, NOAA's Environmental Compliance & Safety Office. The property can now be turned back over to the National Forest Service.